



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY
AFFAIRS (PERA)

BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**

11805 SW 26 Street, Room 208

Miami, Florida 33175-2474

T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera

M.Q. Windows, Inc.

1855 Griffin Road, Suite A-271

Dania, FL 33004

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (in Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "JS Tit & Turn" Inswing Wood Dual Action Window - L.M.I.

APPROVAL DOCUMENT: Drawing No. JS-TT-1, titled "JS Series Tilt & Turn Inswing Wood Windows Miami Dade County", sheets 1 through 7 of 7, dated 07/03/07, with revision dated 12/18/08, prepared by manufacturer, signed and sealed by Scott Wolters, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with M.Q. Windows, Inc. or M.Q. Windows, Inc. logo, Ste-Agathe des Monts, Quebec, Canada, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises NOA # 08-0827.23 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



MP
5/3/12

NOA No. 12-0222.09

Expiration Date: March 25, 2014

Approval Date: April 26, 2012

Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No **JS-TT-1**, titled "JS Series Tilt & Turn Inswing Wood Windows Miami Dade County", sheets 1 through 7 of 7, dated 07/03/07, with revision dated 12/18/08, prepared by manufacturer, signed and sealed by Scott Wolters, P.E.

B. TESTS

1. Test reports on:
 - 1) Air Infiltration Test, per FBC, TAS 202-94
 - 2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
 - 3) Water Resistance Test, per FBC, TAS 202-94
 - 4) Large Missile Impact Test per FBC, TAS 201-94
 - 5) Cyclic Wind Pressure Loading per FBC, TAS 201-94
 - 6) Forced Entry Test, per FBC, TAS 202-94

along with marked-up drawings and installation diagram of a JS series dual action inswing window, prepared by Hurricane Test Laboratory, LLC., Test Report No. **G118-1108-06**, dated 11/29/06, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under previous NOA# 08-0827.23)

C. CALCULATIONS


1. Anchor verification calculations and structural analysis, complying with FBC-2010, dated May 1st, 2012, prepared by Wolters Engineering, Inc., signed and sealed by Scott Wolters, P.E.
2. Glazing complies with ASTM E1300-04

D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11-0325.05** issued to Solutia, Inc. for their "**Saflex and Vanceva clear and color interlayers**" dated 05/05/11, expiring on 05/21/16
2. Notice of Acceptance No. **08-1224.04** issued to Solutia, Inc. for their "**Saflex Composites Glass Interlayer with PET Core**" dated 02/25/09, expiring on 12/11/13.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-0222.09
Expiration Date: March 25, 2014
Approval Date: April 26, 2012


NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS

1. Statement letter of conformance, complying with FBC-2010, dated February 15, 2012, signed and sealed by Scott Wolters, P.E.
2. Laboratory compliance letter for Test Report No. **HTL-G118-1108-06**, issued by Hurricane Test Laboratory, LLC, dated 08/09/07, signed and sealed by Jose Colon, E.I.
(Submitted under previous NOA No. 08-0827.23)

G. OTHER

1. Notice of Acceptance No. **08-0827.23**, issued to M.Q. Windows, Inc. for their "Series JS Inswing Tilt & Turn Wood Window – L.M.I.", approved on 03/25/09 and expiring on 03/25/14.


Manuel Perez, P.E.
Product Control Examiner
NOA No. 12-0222.09
Expiration Date: March 25, 2014
Approval Date: April 26, 2012

TILT & TURN (DUAL ACTION)
WOOD WINDOWS, INSWING
ELEVATION VIEWS
CONFIGURATIONS: x, xx
WOOD: Mahogany
VIEWED FROM THE INSIDE

DESIGN PRESSURE APPLYING TO THIS PAGE
Acting inward: +65 psf Acting outward: -85 psf
Note: All sizes noted are maximum sizes. Sizes smaller in width & height are permitted.
Shutters are not required.

GENERAL NOTES:

1- THIS PRODUCT IS DESIGNED TO COMPLY WITH THE PROVISIONS OF THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE 2010 EDITION OF THE FLORIDA BUILDING CODE.

2- THIS PRODUCT IS LARGE MISSILE IMPACT RESISTANT AND HAS BEEN TESTED IN ACCORDANCE WITH THE HIGH VELOCITY HURRICANE ZONE PROTOCOLS TAS201, 202 AND 203. NO SHUTTERS ARE REQUIRED.

3- WOOD BUCKS (BY OTHERS) AND OPENINGS MUST BE DESIGNED BY THE PROFESSIONAL OF RECORD TO PROPERLY TRANSFER WIND LOADS TO THE MAIN STRUCTURE.

4- SPECIFIED ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.

5- IN ORDER TO VERIFY THAT ANCHORS FOR THIS PRODUCT WERE NOT OVERSTRESSED AS TESTED, A 33% ALLOWABLE STRESS INCREASE WAS NOT USED IN THEIR ANALYSIS. HOWEVER, A LOAD DURATION FACTOR OF $C_d = 1.6$ WAS USED TO VERIFY THEIR SPACING IN WOOD SUBSTRATES.

6- ALL WOOD NOT SEPARATED FROM AND/OR IN DIRECT CONTACT WITH CONCRETE AND MASONRY SHALL BE TREATED IN AN APPROVED PRESERVATIVE OR SHALL BE AN APPROVED DURABLE SPECIES PER FBC 004 ch. 2326.2.4.

FOR ANCHOR SPACING, SEE
ANCHOR REQUIREMENTS TABLE
ON SHEET 4.

NOTE: Numbers in circle are referred
to the bill of materials on sheet 5.

GLAZING TYPE TABLE

GLASS: SINGLE, LAMINATED

OPTION 1: 3/16"(AN)-0.090" PVB Interlayer Saflex IIIG
by Solutia-3/16"(HS)

OPTION 2: 3/16"(HS)-0.090" PVB Interlayer Saflex IIIG
by Solutia-3/16"(HS)

OPTION 3: 5/32"(AN)-0.075" Vanceva SG2 interlayer
by Solutia-5/32"(AN)

GLASS: INSULATED, LAMINATED

OPTION 1a: 1" overall thickness. 3/16"(AN)-0.090" PVB
interlayer Saflex IIIG by Solutia-3/16"(HS); air space
0.377"; Interior 5/32"(AN).

OPTION 2a: 1" overall thickness. 3/16"(HS)-0.090" PVB
interlayer Saflex IIIG by Solutia-3/16"(HS); air space
0.377"; Interior 5/32"(AN).

OPTION 3a: 1" overall thickness. 5/32"(AN)-0.075"
Vanceva SG2 interlayer by Solutia-5/32"(AN); air space
0.456"; Interior 5/32"(AN).

RAISED WOOD PANEL: (specific gravity of 0.59)

Max. DLO area:
-Solid mahogany wood: Max. 7.81 sqf

NOTE:
-See Glazing Details on sheet 5



1855 GRIFFIN ROAD,
SUITE A-271
DANIA, FL 33004

JS SERIE
TILT & TURN INSWING
WOOD WINDOWS
MIAMI DADE COUNTY

Drawing no.: JS-TT-1

Scale: NONE
Drawn by: S. Marcotte

Date drawn: 07/03/07
Date revised: 12/18/08

File: JS-TT-1
Page: 1/7

STRUCTURALLY REVIEWED BY:

Scott Wolters
SCOTT WOLTERS
FL PE# 62354

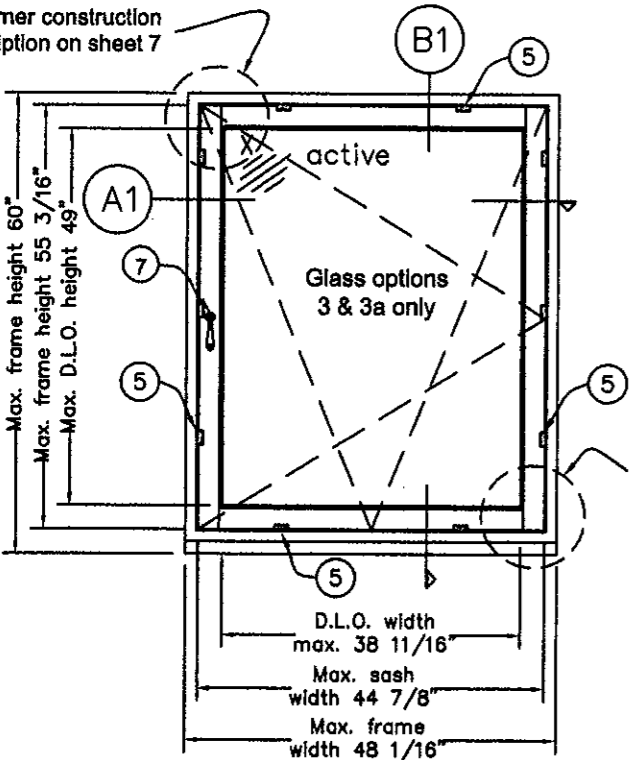
WOLTERS ENGINEERING, INC.
(COA# 27194)
1271 GRANT STREET
HOLLYWOOD, FL 33019

FEB 15 2012

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0222.09
Expiration Date March 25, 2014

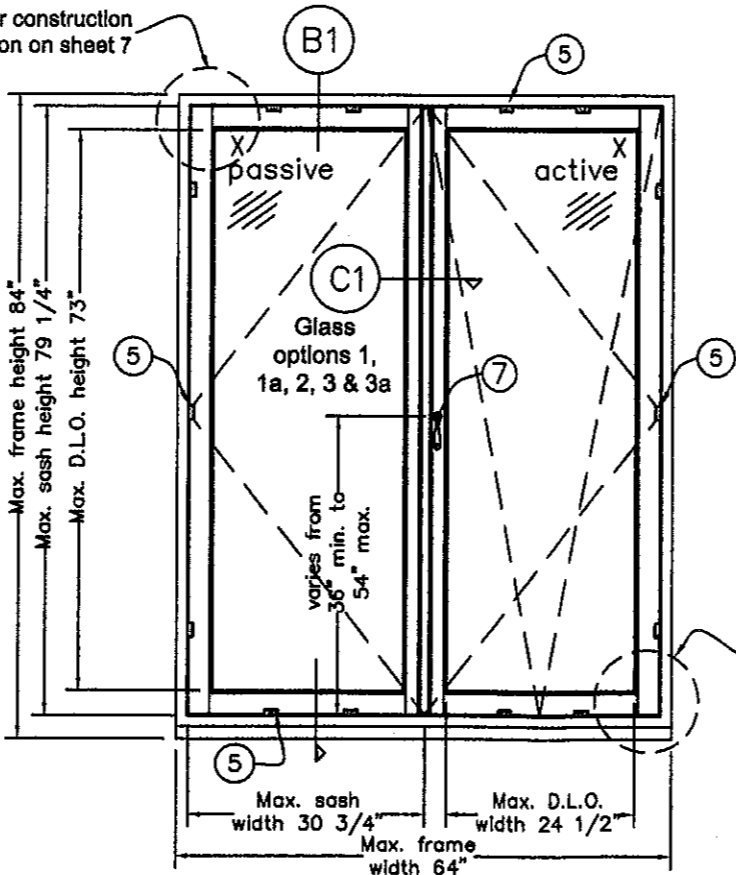
By *Marcus Ferr*
Miami Dade Product Control

See corner construction
description on sheet 7



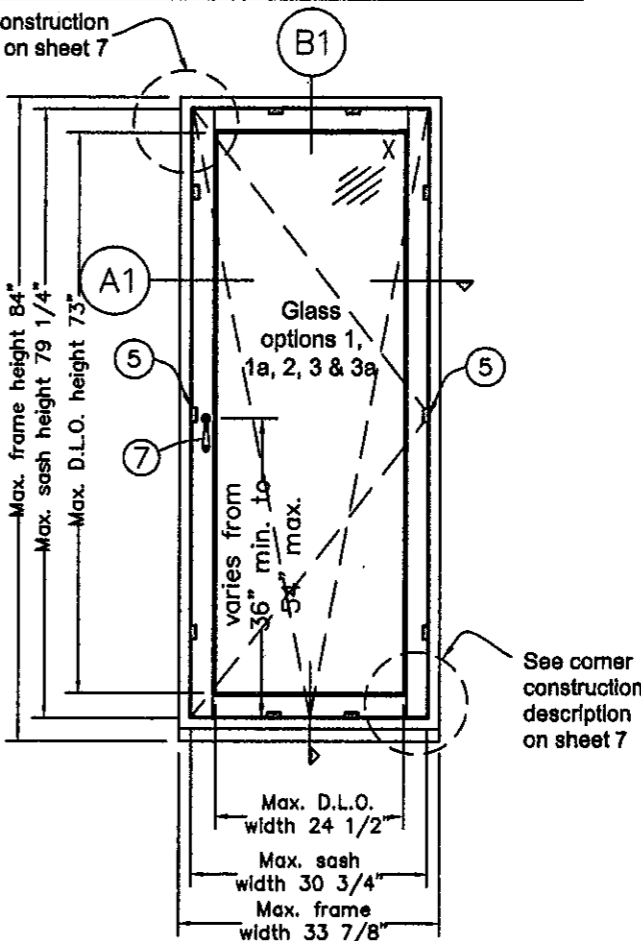
See corner
construction
description
on sheet 7

See corner construction
description on sheet 7



See corner
construction
description
on sheet 7

See corner construction
description on sheet 7



See corner
construction
description
on sheet 7

CROSS SECTION VIEWS



1855 GRIFFIN ROAD,
SUITE A-271
DANIA, FL 33004

JS SERIE TILT & TURN INSWING WOOD WINDOWS MIAMI DADE COUNTY

Drawing no.: JS-TT-1

Scale: NONE Drawn by: S. Marcotte

Date drawn: 07/03/15 Date revised: 12/18/08

File: JS-TT-1 Page: 2/7

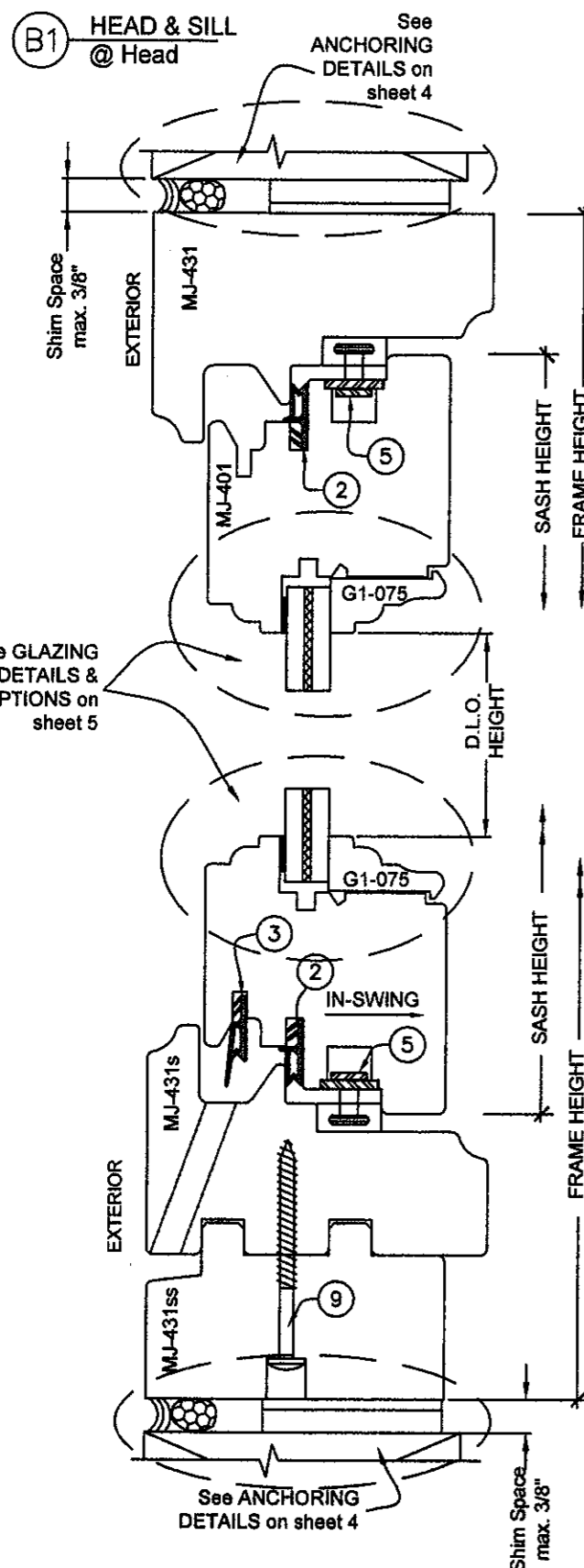
STRUCTURALLY REVIEWED BY:

Scott Wolters
SCOTT WOLTERS
FL PE# 62354

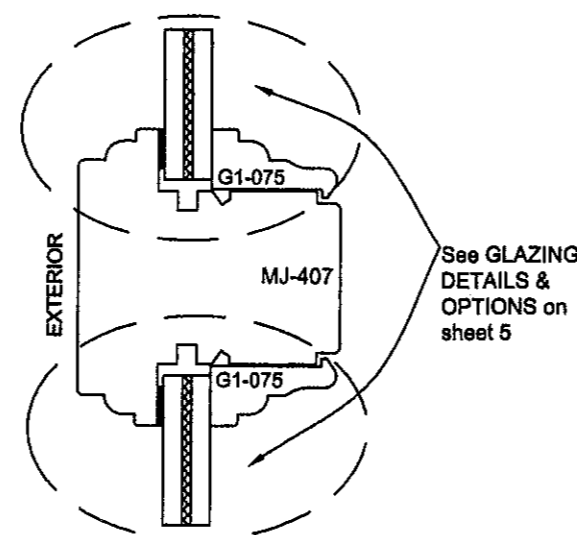
WOLTERS ENGINEERING, INC.
(COA# 27194)
1271 GRANT STREET
HOLLYWOOD, FL 33019
FEB 15 2012

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0222.09
Expiration Date March 25, 2014

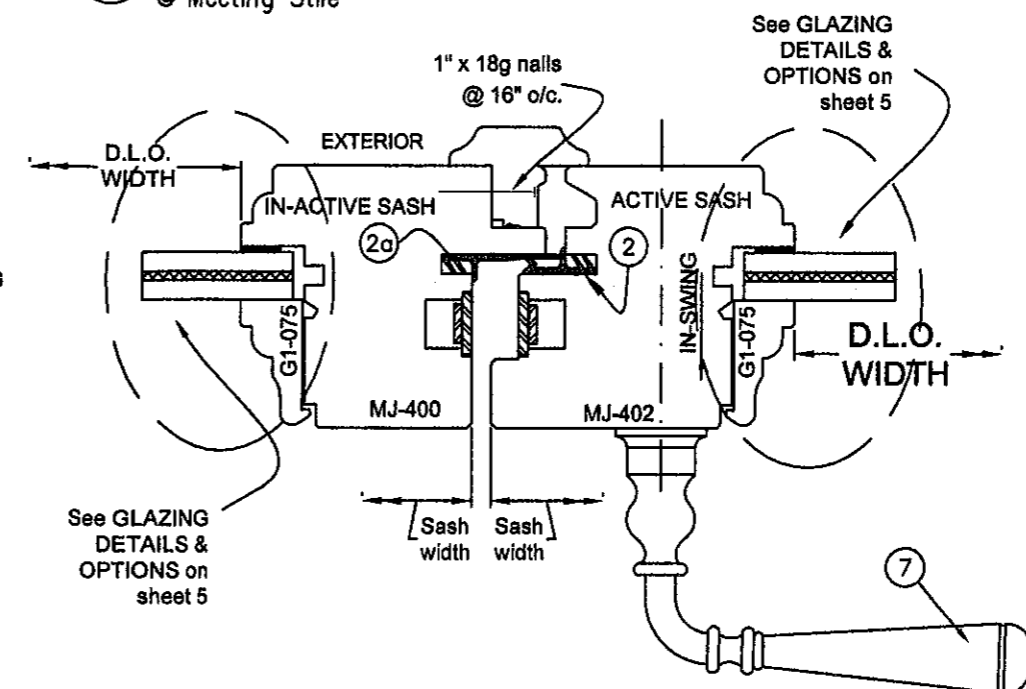
By *Manner*
Miami Dade Product Control



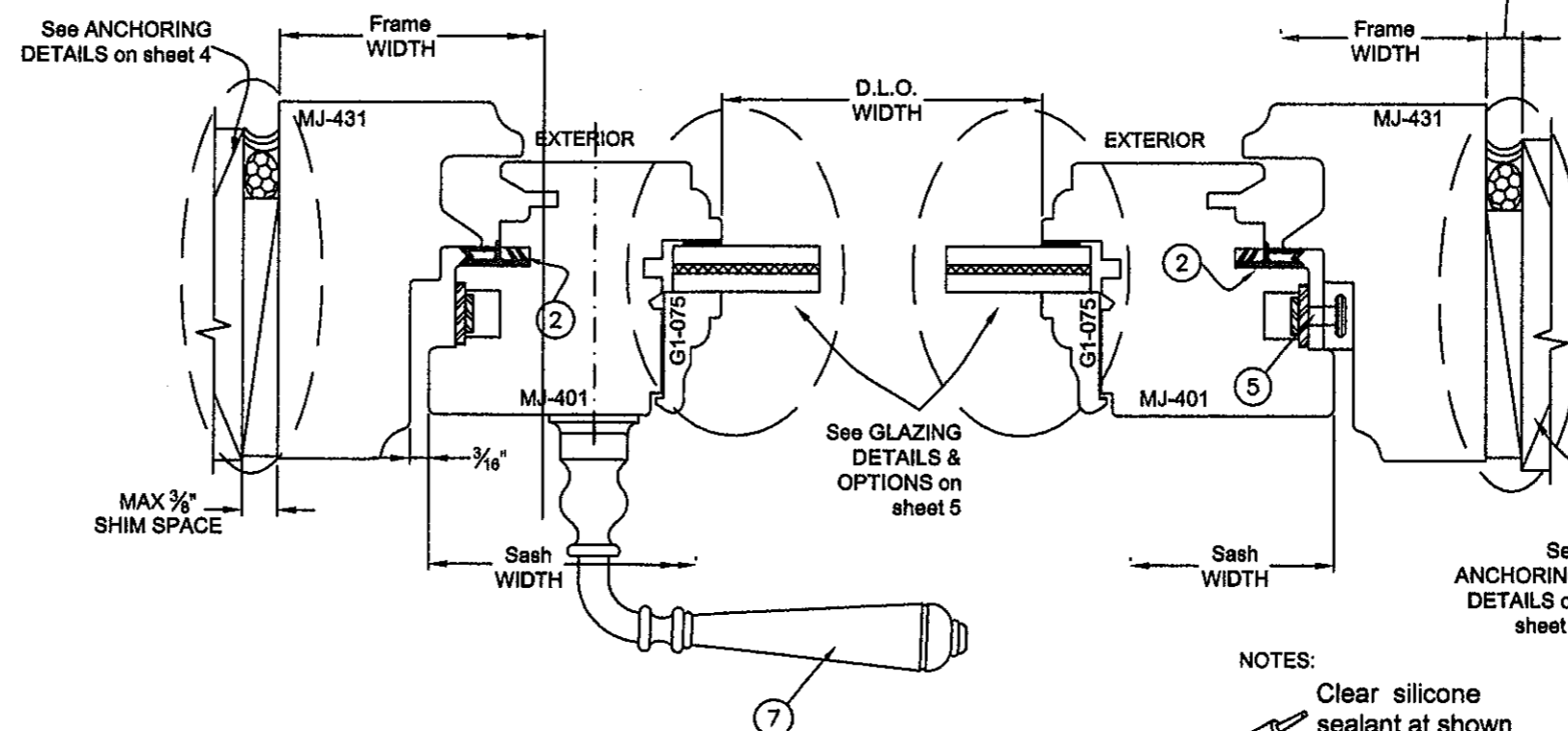
B1 SASH BAR
(optional)



C1 ASTRAGAL
@ Meeting Stile



A1 JAMB
@ Lock style



NOTES:

Clear silicone
sealant at shown
interfaces

Backing rod and
sealant as required

Numbers are referring to
bill of materials (sheet 5)

**JS SERIE
TILT & TURN INSWING
WOOD WINDOWS
MIAMI DADE COUNTY**

Drawing no.: JS-TT-1
Scale: NONE Drawn by: S. Marcotte
Date drawn: 07/03/15 Date revised: 12/18/08
File: JS-TT-1 Page: 3/7

STRUCTURALLY REVIEWED BY:

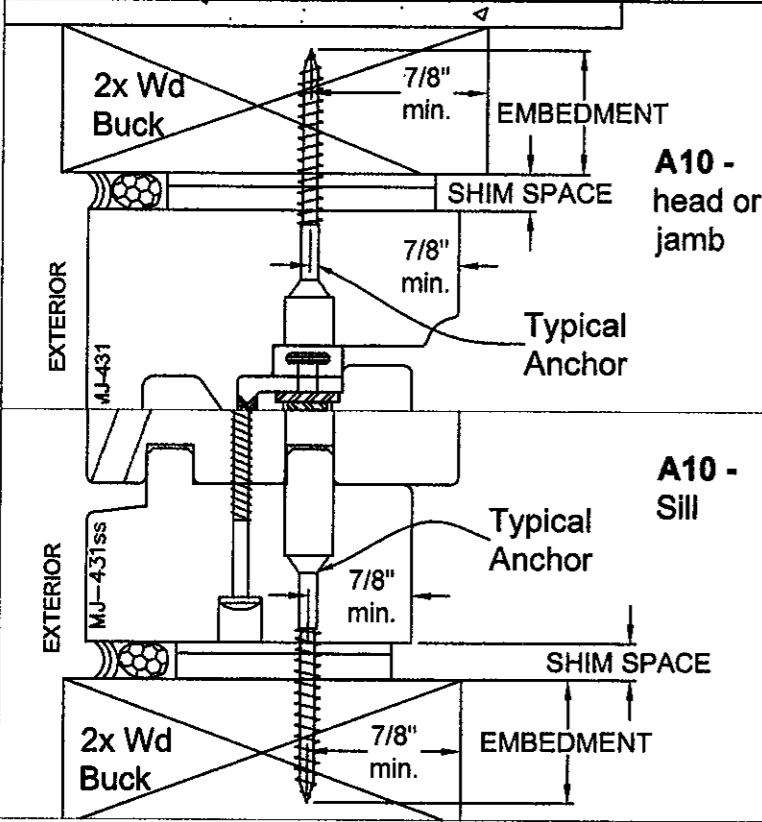
Scott Wolters
SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
1271 GRANT STREET
HOLLYWOOD, FL 33019

FEB 15 2012

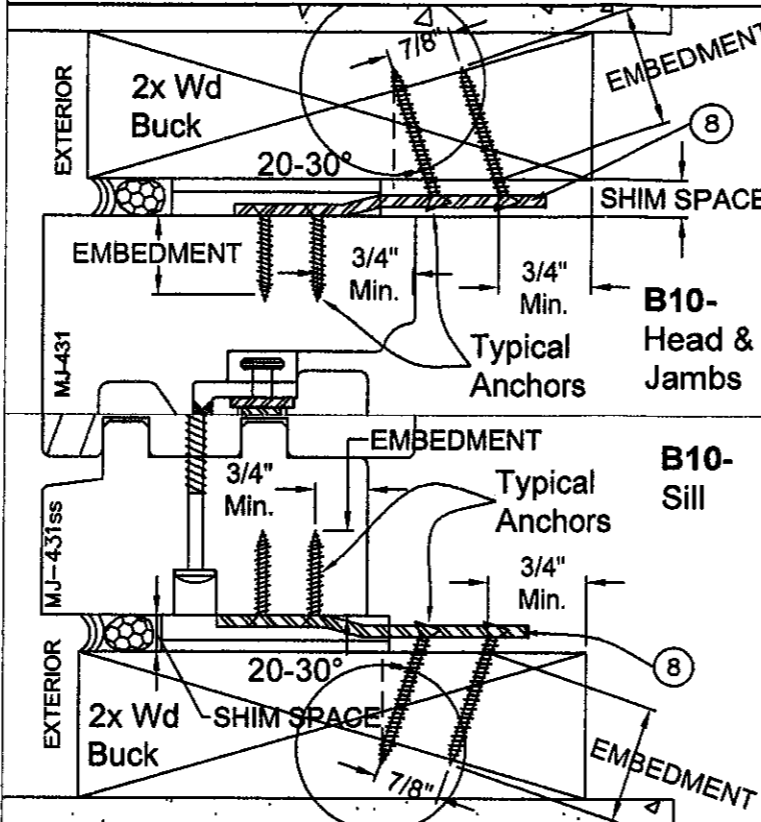
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0222.09
Expiration Date March 25, 2014
By *Mamuel Jue*
Miami Dade Product Control

ANCHORING DETAILS VIEWS

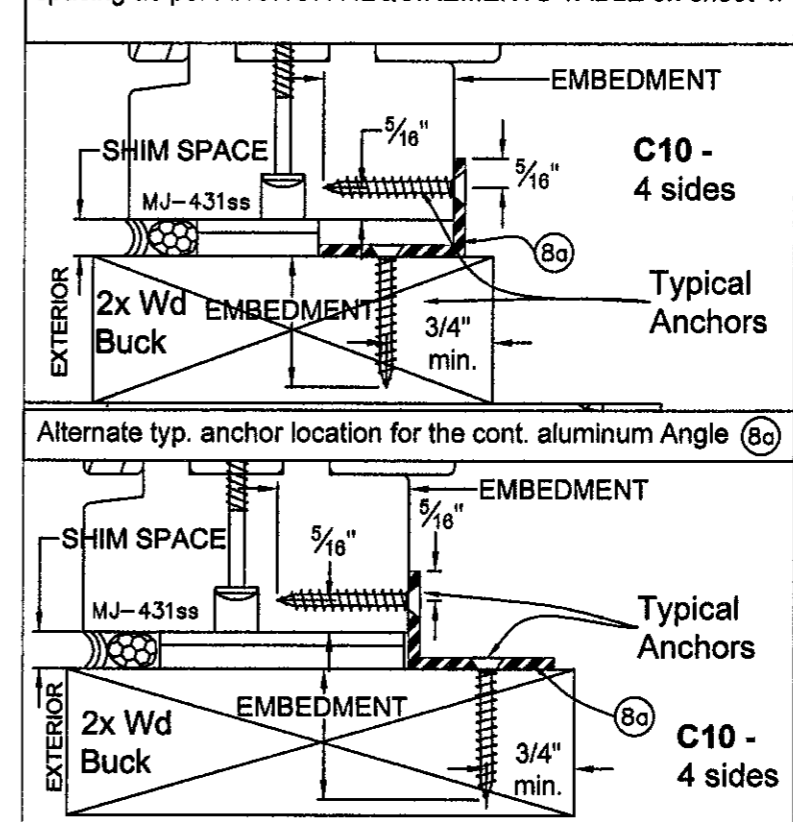
A10 - Typical direct anchor on 2x wood buck using wood screws. Size and spacing as per ANCHOR REQUIREMENTS TABLE on sheet 4.



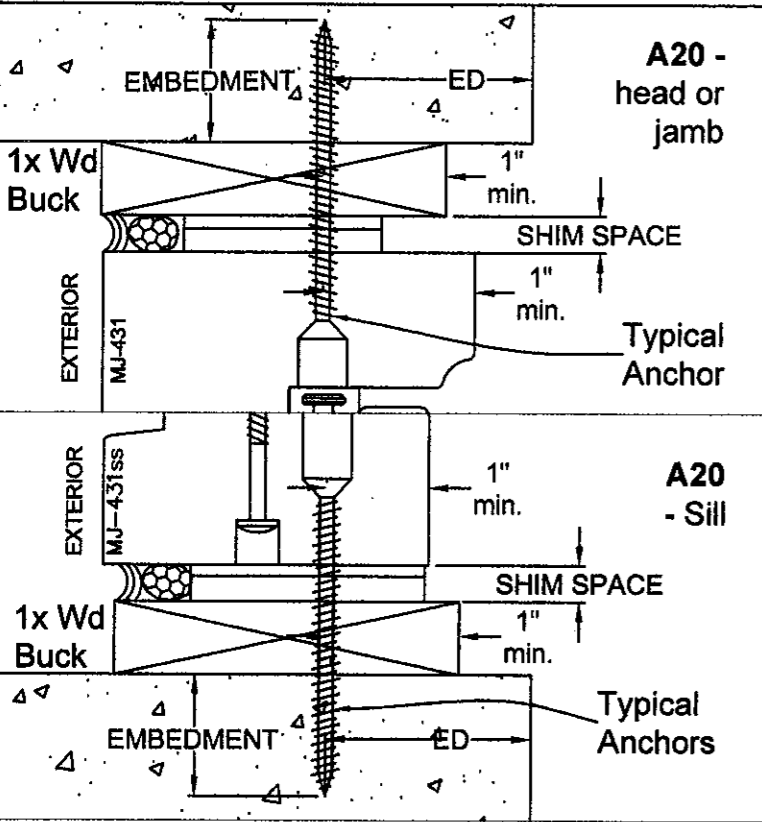
B10 - Typical anchor using Installation Bracket (8) on 2x wood buck using wood screws as per ANCHOR REQUIREMENTS TABLE on sheet 4.



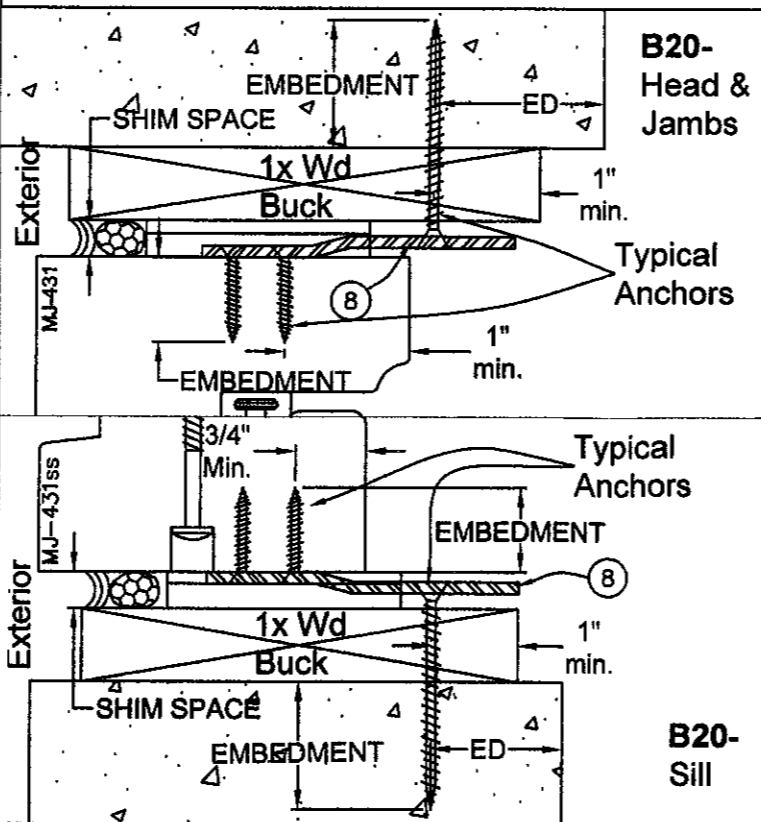
C10 - Typical anchor w/ Continuous Aluminum Angle (8a) using wood screws in 2x wood buck and window frame. Size and spacing as per ANCHOR REQUIREMENTS TABLE on sheet 4.



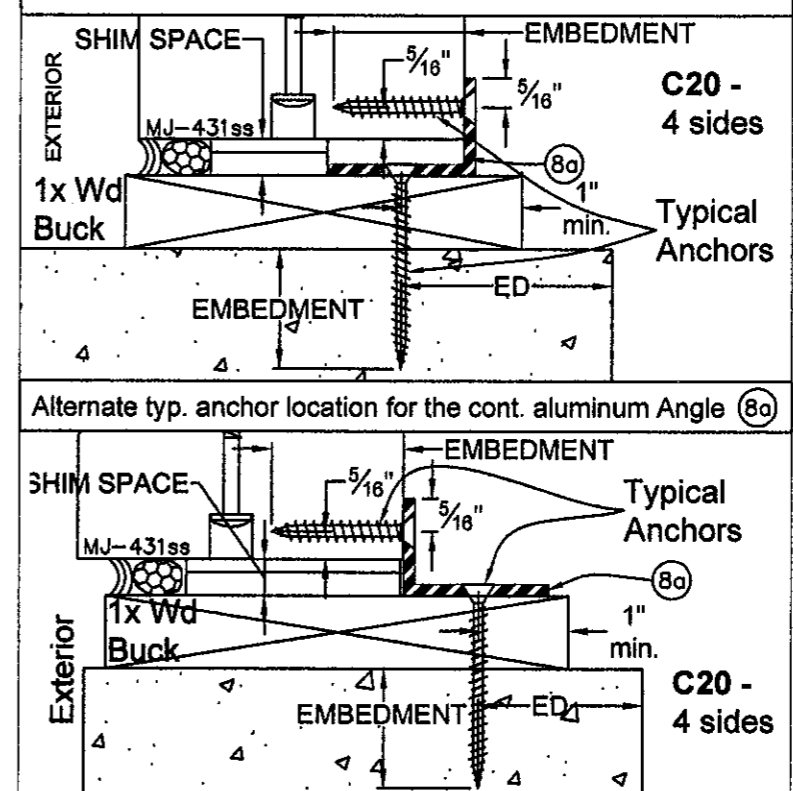
A20 - Typical direct anchor through 1x wood buck into concrete using Tapcon screws. Size and spacing as per ANCHOR REQUIREMENTS TABLE on sheet 4.



B20 - Typical anchor w/ Installation Bracket (8) using Tapcon screws through 1x wood buck into concrete as per ANCHOR REQUIREMENTS TABLE on sheet 4.



C20 - Typical anchor w/ Continuous Aluminum Angle (8a) using Tapcon screws through 1x wood buck into concrete and wood screw into window frame. Size and spacing as per ANCHOR REQUIREMENTS TABLE on sheet 4.



ANCHOR REQUIREMENTS TABLE

JS SERIE TILT & TURN INSWING WOOD WINDOWS MIAMI DADE COUNTY

Drawing no.: JS-TT-1

Scale: NONE Drawn by: S. Marcotte

Date drawn: 07/03/15 Date revised: 12/18/08

File: JS-TT-1 Page: 4/7

STRUCTURALLY REVIEWED BY:

Scott Wolters
SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
1271 GRANT STREET
HOLLYWOOD, FL 33019

FEB 15 2012

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0222-09
Expiration Date March 25, 2014
By *Mamek Ruiz*
Miami Dade Product Control

Anchoring method	Sub- strate	Inst. Ref. No.	Fasteners type, size & embedment	Spacing		Min. dist. from wood buck edge	Min. dist. from msry edge (ED)	Min. dist. from unit frame edge	Min. embedment	
				From corner	On center				Into buck / msry	Into unit frame
Direct anchor (shear screws)	2x_ wood buck	A10 4 sides	Through the unit frame into the buck frame: (1) #14 x 2 3/4" wood screw.	5 1/2"	4 1/2"	7/8"	----	7/8"	1 1/4"	----
	1x_ wood buck	A20 4 sides	Through the unit frame & buck frame into the concrete: (1) 1/4" x 2 3/4" Elco / Textron Tapcon screw.	5 1/2"	5 1/2"	1"	2 1/2"	1"	1 1/4"	-----
PDF-FS- 05/D Installation bracket	2x_ wood buck	B10 head jamb	To the buck frame: (2) #12 X 1 1/2" all threaded (a.T.) wood screws. To the unit frame: (2) # 10 x 1" a.T. wood screws.	5 1/2"	11"	3/4"	----	3/4"	1 1/4"	7/8"
		B10 sill	To the buck frame: (2) #12 X 1 1/2" a.T. wood screws. To the unit frame subsill (MJ431ss): (2) # 10 x 1" a.T. wood screws.	5 1/2"	11"	3/4"	----	3/4"	1 1/4"	7/8"
	1x_ wood buck	B20 head jamb	Through the buck frame into the concrete: (1) 1/4" x 2 3/4" Elco / Textron Tapcon screw. Into the unit frame: (2) #10 x 1" a.T. wood screws.	5 1/2"	10 1/2"	1"	2 1/2"	3/4"	1 1/4"	7/8"
		B20 sill	Through the buck frame into the concrete: (1) 1/4" x 2 3/4" Elco / Textron Tapcon screw. To the unit frame frame : (2) # 10 x 1" a.T. wood screws.	5 1/2"	10 1/2"	1"	2 1/2"	3/4"	1 1/4"	7/8"
Continuous aluminum angle (At sill only)	2x_ wood buck	C10 4 sides	To the window frame and to the buck frame with (1) #12 x1 1/2" a. T. wood screw.	5 1/2"	9"	3/4"	----	5/16"	1 1/4"	1 1/4"
	1x_ wood buck	C20 4 sides	Through the buck frame into the f'c= 3320 psi. concrete: (1) 1/4" x 2 3/4" Elco / Textron Tapcon screw. Into the unit frame: (1) #12 x1 1/2".	5 1/2"	10"	1"	2 1/2"	5/16"	1 1/4"	1 1/4"

NOTES:

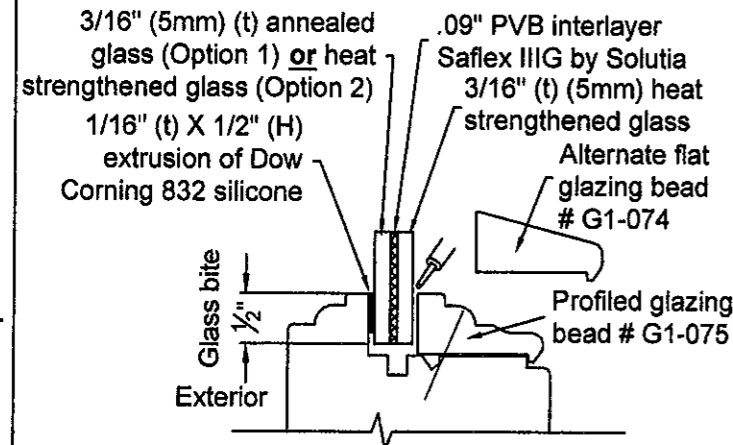
- All shim spaces between window frame and wood buck max. 3/8" @ head, jambs and sill. Use std wood or plastic shims.
- Jambs anchoring identical to head anchoring shown
- Wood bucks (by others) and openings must be designed by the professional of record to properly transfer wind loads to the main structure.
- Installation brackets (8) and aluminum angles (8a) may be positioned at the interior or exterior side of the window.
- Materials, but not limited to steel & steel screws that come in contact with other dissimilar materials shall meet with section 2003.8.4 of the 2004 edition of the Florida Building Code with the 2005 supplement.

))) Backing rod and sealant as required

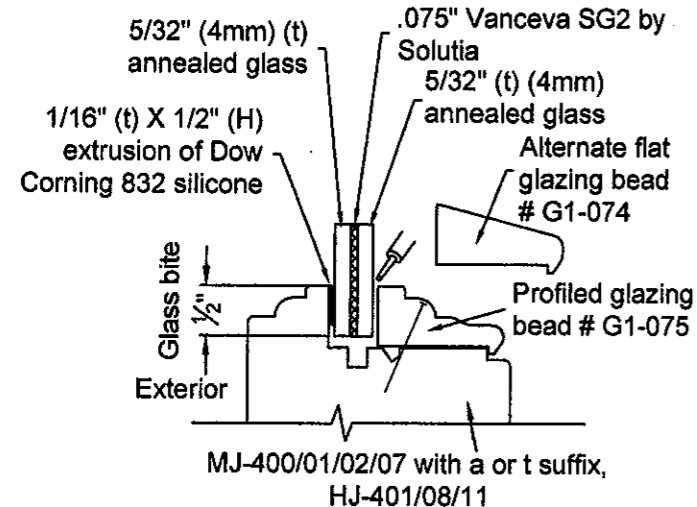
Numbers in circle are referring to bill of materials (sheet 5)

Typ. glazing w/ monolithic laminated glass

Options 1 & 2

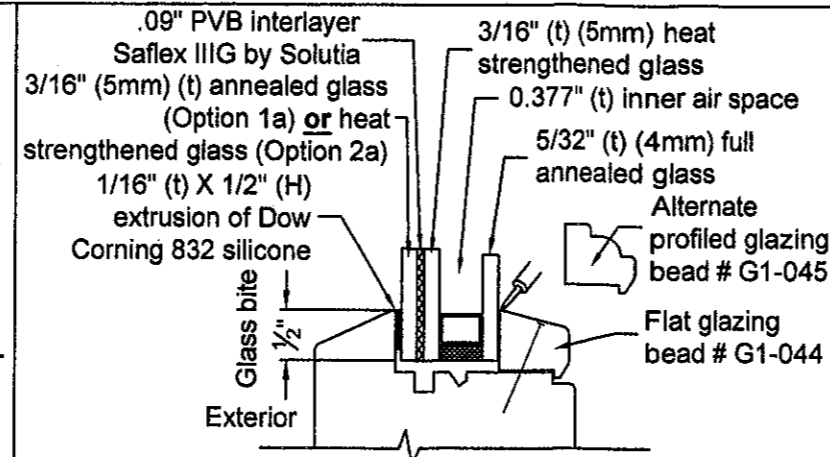


Option 3

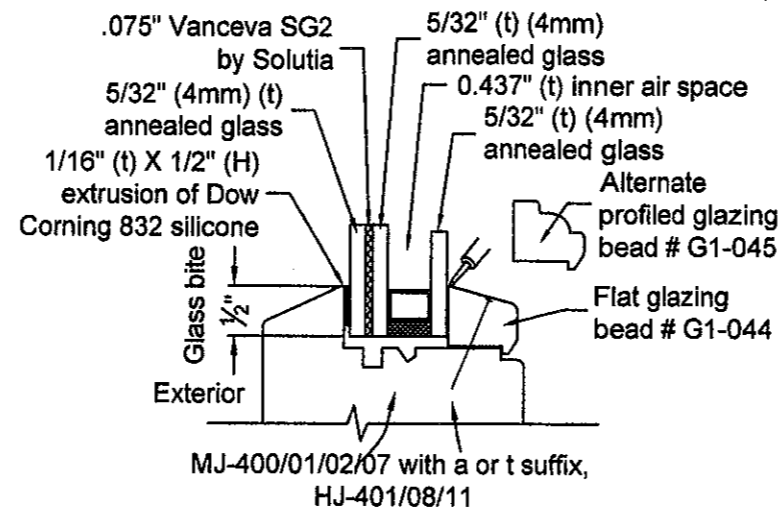


Typ. glazing w/ double insulated glass

Options 1a & 2a

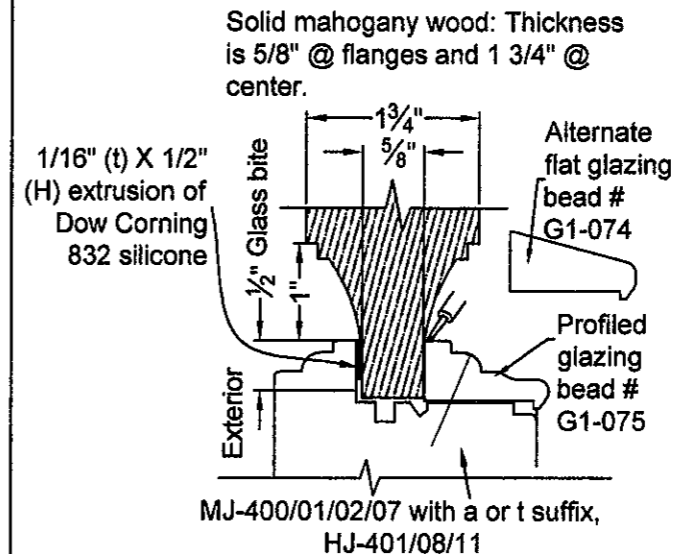


Option 3a

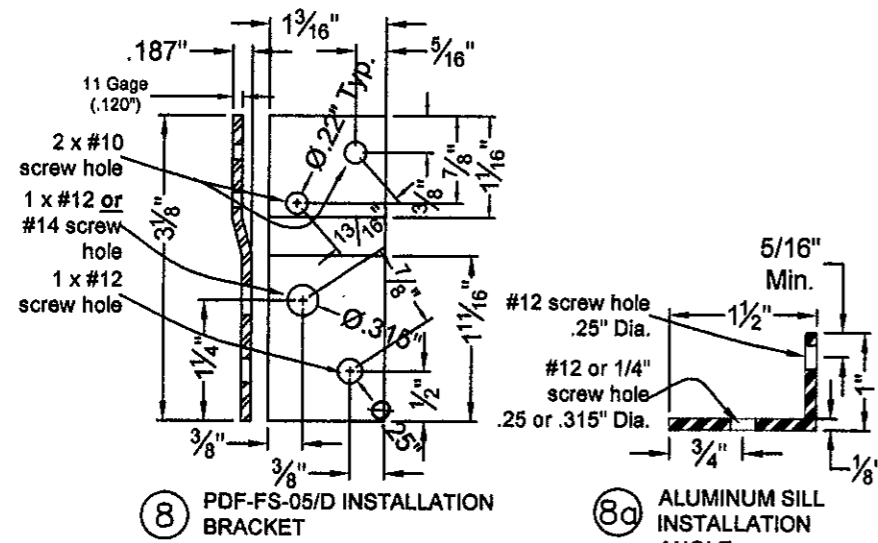
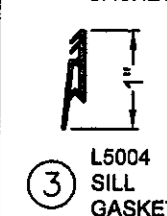
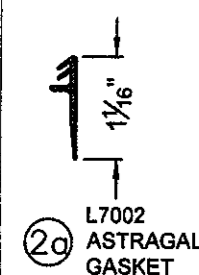
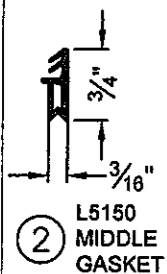


GLAZING DETAILS

Typ. glazing w/ raised wood panel



ACCESSORIES



BILL OF MATERIALS

(see also related cross sections details)

Ref.	ITEM DESCRIPTION	MANUFACTURER / NOTES
②	Brüglman L5150, Push-in EPDM middle gasket	Push-in gasket, in a continuous groove around the sash.
②a	Brüglman L7002, Push-in EPDM In-active astragal meeting stile middle gasket	Push-in gasket in a continuous groove. Ends @ sash's head & sill glued to the L5150 gasket
③	Brüglman L5004, Push-in EPDM sill gasket	Push-in gasket, in a continuous groove at sash sill.
⑤	Ferco multi-point lock system.	Ferco G-20755 corner gear Ferco 6-26295 steel intermediate arm Ferco 6-26076 steel lever. Ferco 6-25485 steel mechanism Bronze cast alloy keeper, #833856.
⑦	Lock handle	As required to operate lock.
⑧	PDF-FS-05/D Installation bracket Gage 11 ASTM A653 SQ 33 G90 galvanized steel	To door frame: 2x #10 x 1" a.t. wood screws. Min. embedment is 3/4". To door sill frame: 2 x #10 x 3/4" a.t. wood screws. Min embedment is 5/8". To structure as per ANCHOR REQUIREMENTS on sheets 4
⑧a	Installation Aluminum angle (Alloy 6063-T5)	Screwed to wood sill and to structure as per ANCHOR REQUIREMENTS on sheets 4
⑨	Subsill to sill wood pan head assembly screw.	(1) #12 x 2 1/2" @ 5 1/2" from ends & 12" o/c.

REF. NUMBERS ARE RELATED TO THOSE USED ON CROSS SECTIONS DRAWINGS

JS SERIE TILT & TURN INSWING WOOD WINDOWS MIAMI DADE COUNTY

Drawing no.: JS-TT-1

Scale: NONE Drawn by: S. Marcotte

Date drawn: 07/03/15 Date revised: 12/18/08

File: JS-TT-1 Page: 5/7

STRUCTURALLY REVIEWED BY:

Scott Wolters
SCOTT WOLTERS
FL PE# 62354
WOLTERS ENGINEERING, INC.
(COA# 27194)
1271 GRANT STREET
HOLLYWOOD, FL 33019
FEB 15 2012

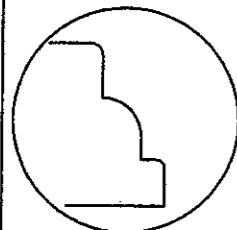
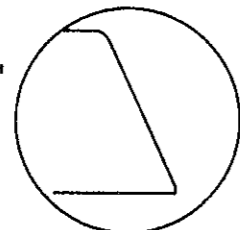
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0222-09
Expiration Date March 25, 2014
By *Manuel Perez*
Miami Dade Product Control

WOOD PROFILES

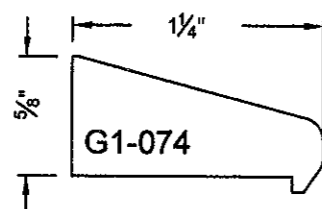
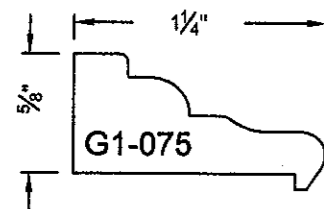
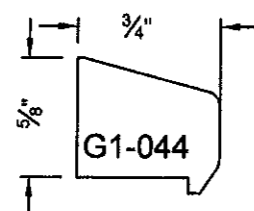
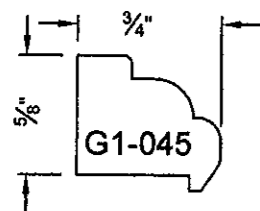
NOTE: All profiles dimensions shown are minimum dimensions.

Alternate glazing fence details

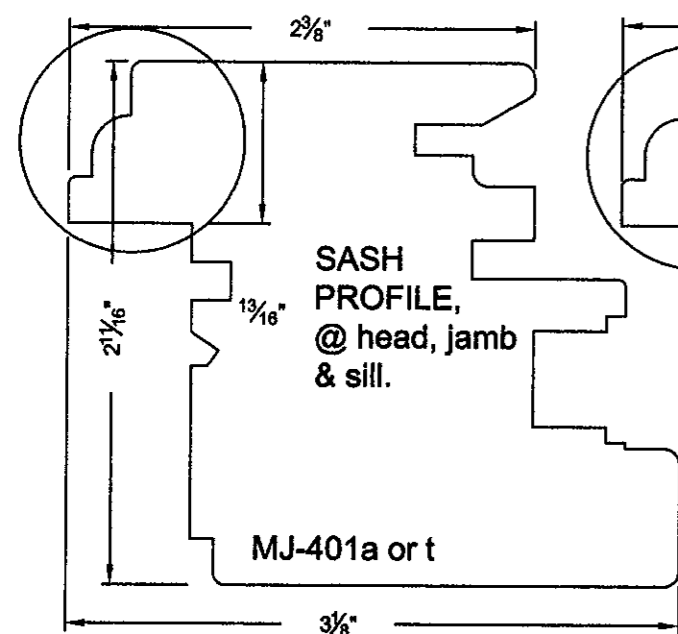
Flat glazing fence:
Part number w/ "a"
suffix.



Moulded glazing
fence: Part number
w/ "t" suffix.

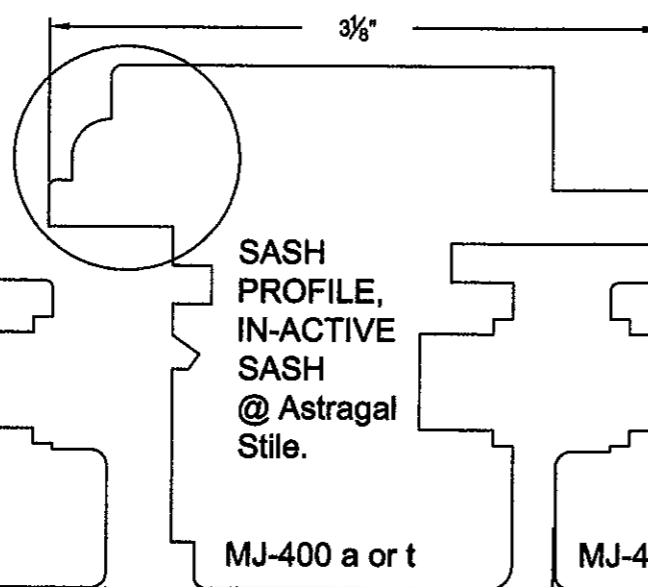


GLAZING BEADS



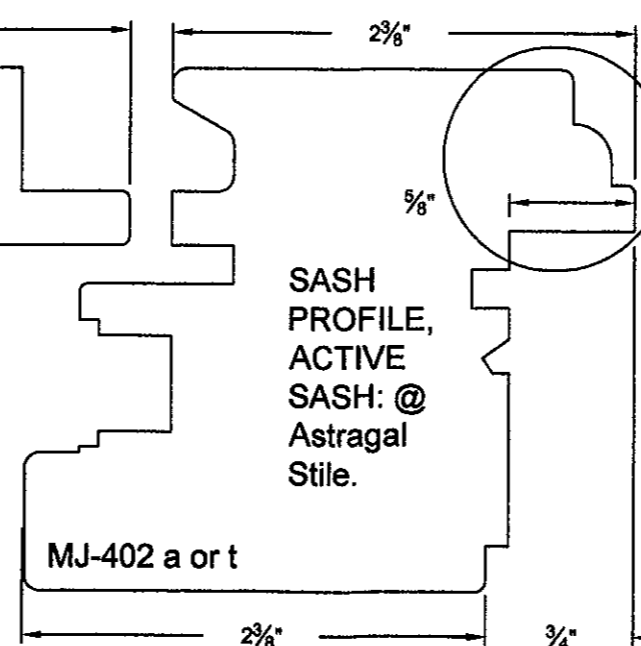
SASH
PROFILE,
@ head, jamb
& sill.

MJ-401a or t



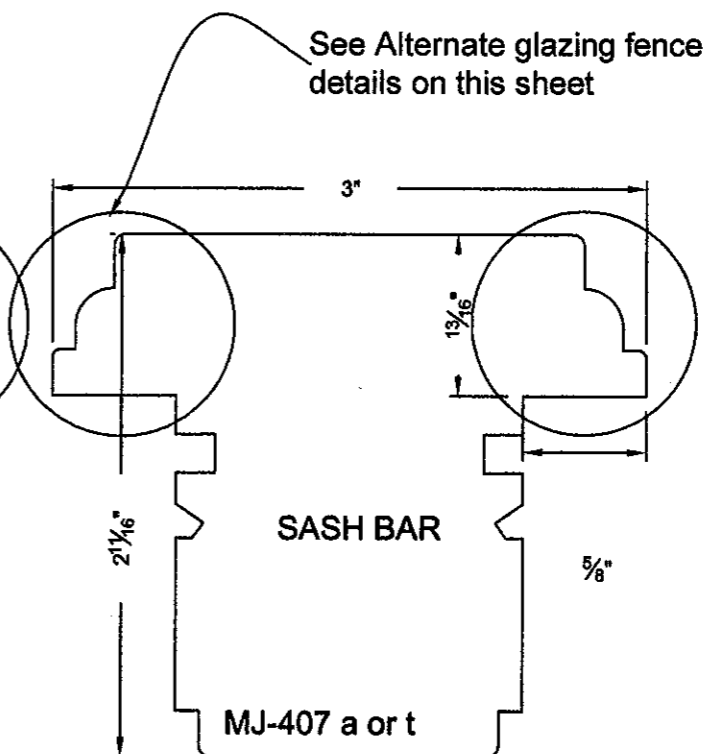
SASH
PROFILE,
IN-ACTIVE
SASH
@ Astragal
Stile.

MJ-400 a or t



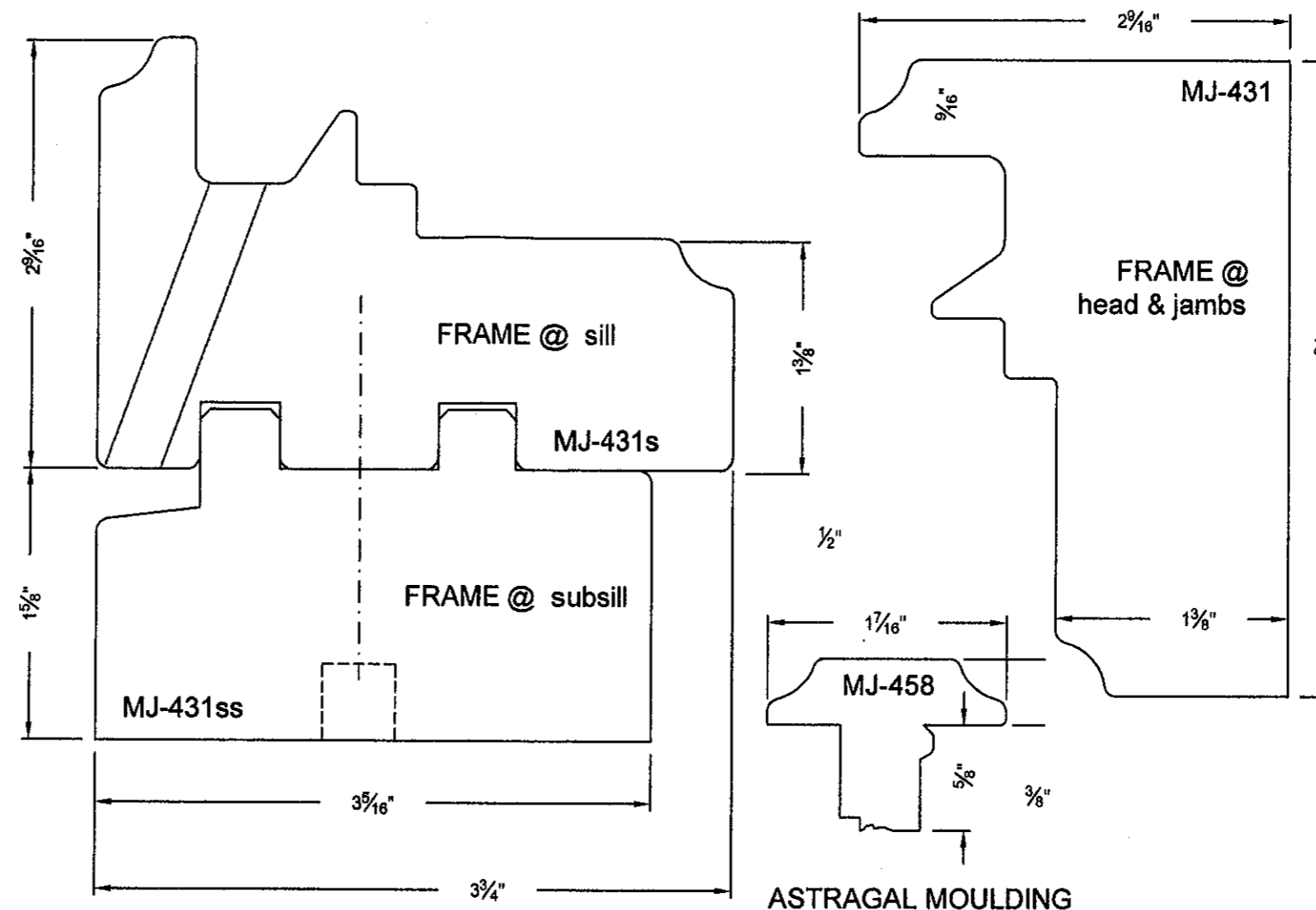
SASH
PROFILE,
ACTIVE
SASH: @
Astragal
Stile.

MJ-402 a or t



SASH BAR

MJ-407 a or t



FRAME @ sill

MJ-431s

FRAME @ subsill

MJ-431ss

MJ-458

FRAME @
head & jams

MJ-431

ASTRAGAL MOULDING



1855 GRIFFIN ROAD,
SUITE A-271
DANIA, FL 33004

JS SERIE
TILT & TURN INSWING
WOOD WINDOWS
MIAMI DADE COUNTY

Drawing no.: JS-TT-1

Scale: NONE Drawn by: S. Marcotte

Date drawn: 07/03/15 Date revised: 12/18/08

File: JS-TT-1 Page: 6/7

STRUCTURALLY REVIEWED BY:

Scott Wolters
SCOTT WOLTERS
FL PE# 62364

WOLTERS ENGINEERING, INC.
(COA# 27194)
1271 GRANT STREET
HOLLYWOOD, FL 33019
FEB 15 2012

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 12-0222-09
Expiration Date March 25, 2014

By *Maurice Perry*
Miami Dade Product Control

JS SERIE
TILT & TURN INSWING
WOOD WINDOWS
MIAMI DADE COUNTY

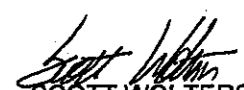
Drawing no.: JS-TT-1


Scale: NONE Drawn by: S. Marcotte

Date drawn: 07/03/15 Date revised: 12/18/08

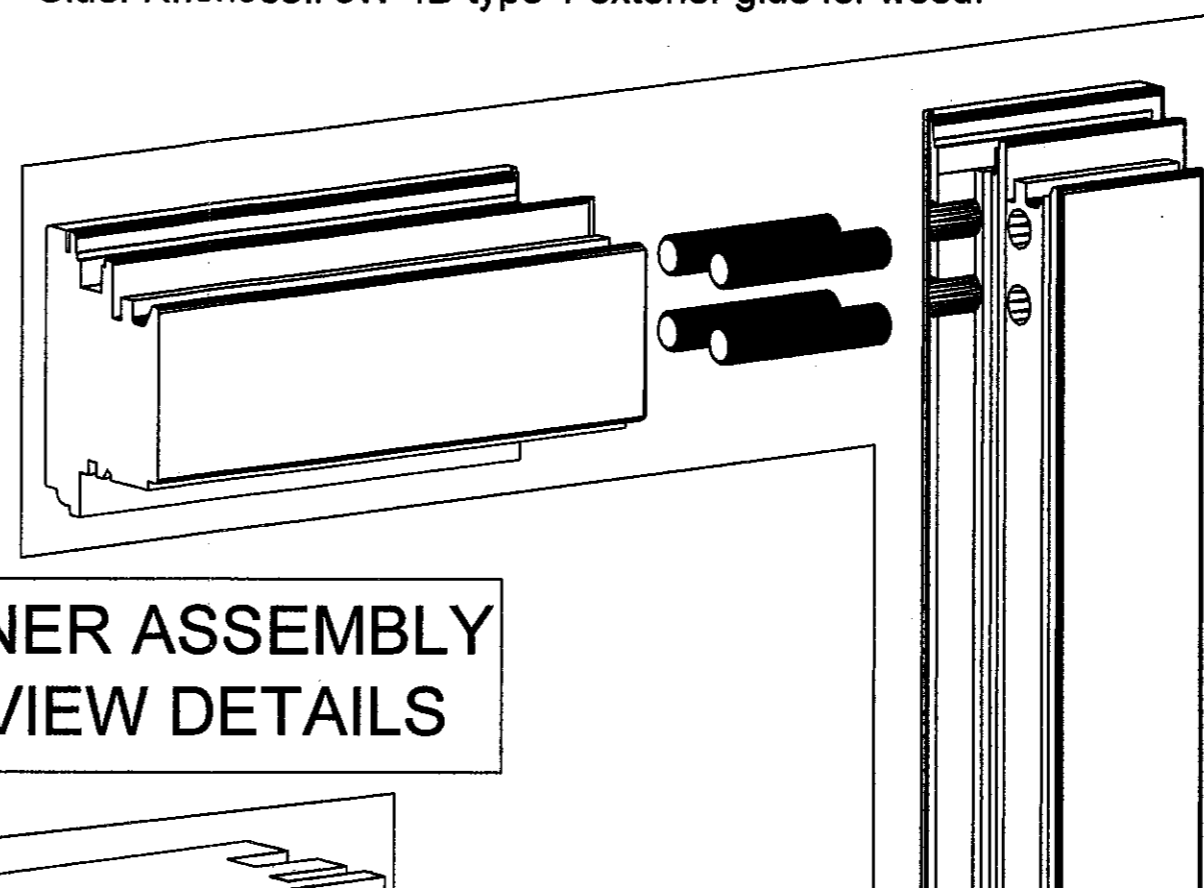
File: JS-TT-1 Page: 7/7

STRUCTURALLY REVIEWED BY:


 SCOTT WOLTERS
 FL PE# 62354
 WOLTERS ENGINEERING, INC.
 (COA# 27194)
 1271 GRANT STREET
 HOLLYWOOD, FL 33019
 FEB 15 2012

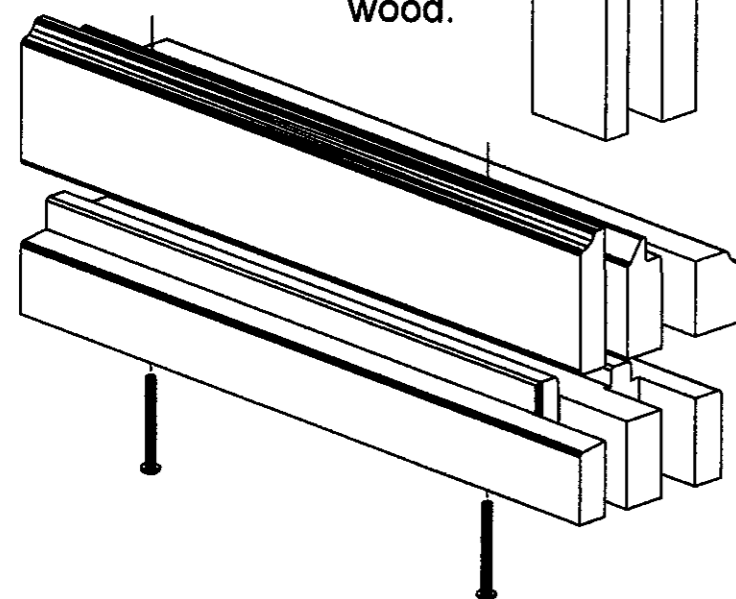
PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 12-0222-09
 Expiration Date 12/23/2014
 By 
 Miami Dade Product Control

Sash rails to sash stiles: 4x 7/16" x 2 3/4" wood
 dowels, w/ 1 3/8" embedment to each profile
 Glue: Rhenocoll 3W-4B type 1 exterior glue for wood.

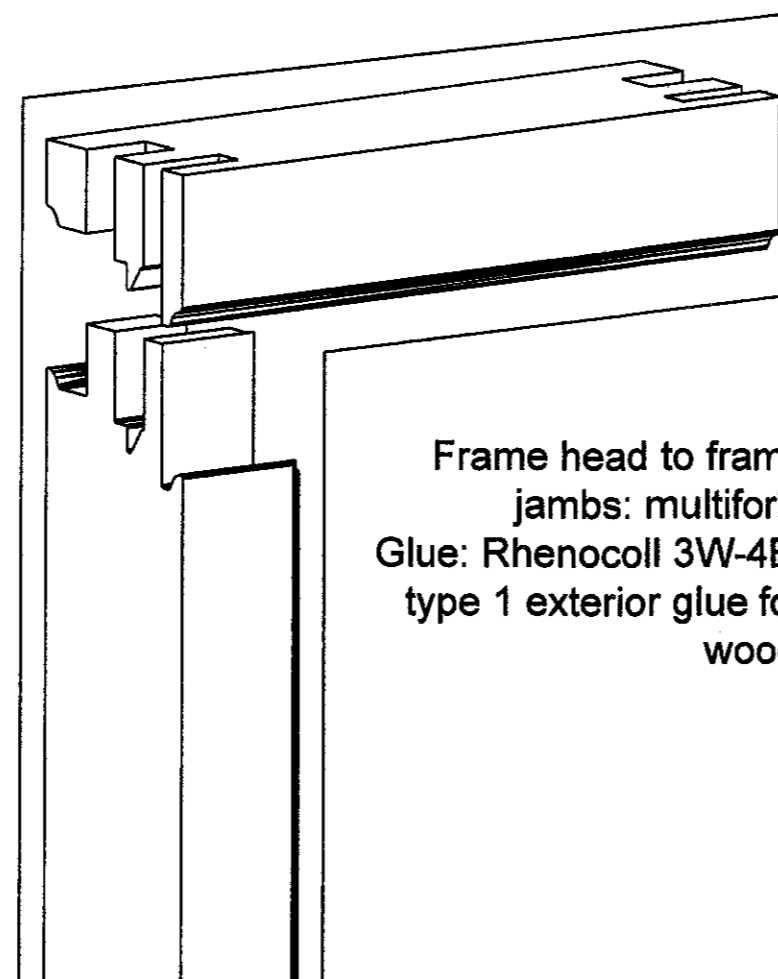


CORNER ASSEMBLY
3D VIEW DETAILS

Frame subsill to frame
 sill: (1) #12 x 2 1/2" @
 5 1/2" from ends & 12"
 o/c. Frame sill & subsill
 to frame jambs:
 multifork.
 Glue: Rhenocoll 3W-4B
 type 1 exterior glue for
 wood.



Frame head to frame
 jambs: multifork.
 Glue: Rhenocoll 3W-4B
 type 1 exterior glue for
 wood.



Sash bar to sash
 stiles: 2x #12 x 3"
 wood
 screws at each end
 min. embedment is
 1 1/2"

